

# Clinical approach to driving and the older person



CPD 

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## Background

Austrroads has recently introduced a new set of guidelines for driving assessment in Australia. It is therefore timely to review the clinical approach to driving assessments, which is often seen as one of the most difficult areas of general practice.

## Objective

This article reviews the difficulties of driving assessment, including what measures there are to guide general practitioners (GPs), and proposes a practical approach to this issue for general practice.

## Discussion

There is as yet no widely agreed toolkit for office-based driving assessment in general practice. On-road assessment by a trained assessor, such as an occupational therapist, remains the gold standard. GPs should consider a stepped approach to driving cessation by raising this issue well in advance of the need for licence termination, working with the patient and the family through the driving cessation itself and providing follow-up support for the patient afterwards.

**DEMOGRAPHIC CHANGE** is driving up the age of the population and, with it, the proportion of people aged  $\geq 65$  years attending general practice; for example, in 2018–19, standard consultations (Medicare item 23) accounted for 26.7% of consults, which increased to 30.4% of consults in 2021–22).<sup>1</sup> The older age group often has multiple comorbidities, frequently including cognitive impairment or dementia and frailty. This creates a clinical challenge for GPs confronted with a requirement to assess these patients' ability to continue driving. This paper explores an approach to this challenge, informed by the evidence and by the driving guidelines. It focuses on private vehicle licence standards, rather than commercial standards.

The latest edition of the Austrroads assessing fitness to drive guidelines was launched in 2022,<sup>2</sup> and replaces all previous versions. The new guidelines provide a comprehensive review of the evidence related to driving for a series of 10 broad clinical areas.<sup>2</sup> GPs should refer to the assessing fitness to drive guidelines in all cases where a patient presents with a condition that may affect driving, and particularly when conducting a fitness-to-drive assessment mandated by law for eligible older people.

## Aim

The aim of this article was to review the difficulties of driving assessment, what measures GPs have to guide them, including Austrroads and state and territory laws, and to propose a practical approach to driving assessments for general practice.

## Limitations and challenges in the driving assessment

### Evidence

Austrroads points out<sup>2</sup> that its guidance is based on scientific evidence, which is subject to a number of limitations, including sources of bias (eg the number of crashes depends on self-report). Therefore, GPs need to rely on their clinical judgement to augment the guidance provided in the Austrroads guidelines.<sup>2</sup>

### Multiple comorbidities

Older people rarely have one clinical condition, and an individual assessment is needed to consider the additive effects of ageing plus a range of mental and physical comorbidities, which is not a simple ask. According to Austrroads:

*Although these medical standards are designed principally around individual conditions, clinical judgement is needed*

*to integrate and consider the effects on safe driving of any medical conditions and disabilities that a patient may present with. However, it is insufficient simply to apply the medical standards contained in this publication for each condition separately because a driver may have several minor impairments that alone may not affect driving but when taken together may make risks associated with driving unacceptable. Therefore, it is necessary to integrate all clinical information, bearing in mind the additive or compounding effect of each condition on the overall capacity of the patient to drive safely.<sup>2</sup>*

### Medications: Prescribed and non-prescribed

A range of medications may affect driving, and the GP should review a patient's medications to assess whether any may impair judgement or reaction time, particularly because the older brain is sensitive to such effects.<sup>3</sup> These medications include, but are not restricted, to benzodiazepines, antidepressants, antipsychotics, opioids and medical cannabis. GPs should also consider whether the patient is using alcohol or recreational drugs, and the effects this may have on driving, particularly in combination with prescribed or over-the-counter medications (see Section 9 of the Austroads guidelines<sup>2</sup>). Deprescribing may be considered.<sup>4</sup>

### Public health considerations

The GP should remain aware that the decision to drive is not simply an individual risk decision. The older driver may be the one driver in the household, responsible for transporting their spouse, grandchildren and others, and therefore responsible for their lives and the lives of others on the roads. This is a challenging concept for many older drivers, especially those with cognitive impairment, and GPs find it among the most challenging conversations to have with their patients.<sup>5</sup> As Austroads emphasises:

*Health professionals, in partnership with drivers, the road transport industry and governments, play an essential role in keeping all road users safe.<sup>2</sup>*

Austroads also suggests that the key question should be:

*Is there a likelihood the person will be unable to control the vehicle and/or unable to act or react to the driving environment in a safe, consistent and timely manner?<sup>2</sup>*

As well as the national guidelines, there are also state- and territory-based rules around driving cessation, particularly around mandatory notification to the traffic authorities (refer to Appendix 3.1 in the Assessing fitness to drive guidelines).<sup>2</sup> GPs should become familiar with their own state's or territory's rules about these matters.

### How might the GP approach driving cessation?

As well as the limitations of the Austroads document discussed above, there are other barriers to GP discussion of driving cessation, including: concerns about impairment of the GP-patient relationship if the issue is raised,<sup>5</sup> because such conversations may become adversarial; a lack of certainty about whether the person is fit to drive based on the in-clinic assessment and limited access to on-road driving testing;<sup>6</sup> patient and carer lack of insight into lessening driving ability;<sup>5</sup> and a sense that patients value maintaining agency<sup>7</sup> and may be harmed psychosocially if the GP insists on driving cessation.<sup>8</sup>

Nevertheless, GPs are often required to assess people for fitness to drive. Such assessments may be at regular intervals, mandated by the state government, because of the driver's age or they may be indicated by a particular condition, such as diabetes. McKernan et al<sup>9</sup> describe some useful ways in which GPs can mitigate the adversarial nature of these conversations. It is important to note that the GP should be cautious about relying on self-report or report from others, both of which may over- or underestimate the patient's ability to drive. A good clinical examination and appropriate testing remain key.

### Early conversations

Early conversations are recommended as people get older, but before they are unfit

to drive.<sup>2,5</sup> These early conversations may prepare people for the fact that at some point they will have to give up driving. In these conversations, self-assessment of fitness to drive may be encouraged. The *Driving and staying independent in senior years* handbook<sup>10</sup> may be helpful for people to work through at home and then discuss with their GP. There is some evidence that self-care behaviours, such as community engagement, may be protective against driving cessation, and GPs could support older people in this.<sup>11</sup> Readers should also note that the 2022 Austroads document revised the definition of dementia to exclude preclinical and prodromal dementia.<sup>2</sup> Therefore, patients with these conditions do not need to be issued with a conditional licence; however, regular monitoring of symptoms and early discussions about the transition to non-driving are still important.<sup>2</sup>

### Fitness-to-drive assessments

The health assessment for people aged 75 years and older<sup>12</sup> offers the opportunity to do a general assessment, as well as some screening tests, which may contribute to the assessment of driving. Sensory, motor and cognitive function are recommended targets for these assessments.<sup>2</sup> A referral to an optometrist may uncover previously unrecognised visual problems. The GP should consider musculoskeletal conditions, particularly those affecting the upper limbs, lower limbs, back and neck, in relation to their effect on driving (see Section 5 of the Austroads guidelines<sup>2</sup>) and refer the patient for occupational therapy, rehabilitation or other services. Cognitive function screening tests, such as the Mini-Mental State Examination,<sup>13</sup> Montreal Cognitive Assessment<sup>14</sup> trail making test,<sup>15</sup> General Practitioner assessment of Cognition<sup>16</sup> and frailty assessments,<sup>17</sup> may be helpful. However, on-road driving assessment is superior to all of these.<sup>18,19</sup> Local primary health network (PHN) HealthPathways, available on the PHN website, may provide guidance as to specific local resources. There are driving-specific toolkits,<sup>14,20</sup> but none has been universally accepted as a gold standard in Australia, provoking calls for such a toolkit to be developed for use in general practice.<sup>6</sup>

If the tests suggest some early impairment, whether cognitive or physical, GPs may offer support in the form of information (eg from Dementia Australia<sup>21</sup>), relevant assessment and management, such as through an occupational therapist, driving assessment, driving rehabilitation, vehicle modification and driving restrictions (eg distance, night driving).<sup>2</sup> HealthPathways may provide local referral details for these resources. Medications may be reviewed and those that may contribute to driving impairment reduced or ceased. It is helpful for the GP to involve other family members in these discussions.<sup>2,9</sup> Family members may contribute their concerns about their relative's driving and offer supportive suggestions as to alternatives to driving.

### Unfit to drive/does not want to drive

It is important for the GP to support their patients in giving up their licence. This goes beyond the decision as to whether the person can drive and includes alternative options to driving, including access to community transport and public transport. In Australia, the GP may facilitate the person registering with My Aged Care so they can access community transport options. Home delivery services may be considered, such as Meals on Wheels. Travel concessions, disability parking vouchers for use by friends or relatives who are offering a lift to the person or taxi vouchers may be available.

It is vital that the GP encourages the person to continue their engagement in social and leisure activities as they age, despite the loss of a licence.

### Conclusion

Driving cessation, particularly as patients grow older, is a particularly challenging area for GPs in Australia. As evidence of validity is not yet established for most office tests, on-road testing is the gold standard, but access is limited by geography and cost. In view of the importance of driving safely, state and Commonwealth health departments should consider subsidising these tests or providing evidence-based alternatives, such as driving simulators. There is no

universally accepted office toolkit for GPs to assess driving capacity. GPs should consider a stepped approach, starting by raising the issue well before licence cancellation is needed, and working with the patient to consider alternative options. Evidence provided by tests of cognition and physical function, such as eyesight, may provide impetus for further discussion. There are many strategies that can be discussed, including continuing to drive temporarily but with limitations to distances driven if this seems reasonable, and alternatives to driving, such as registration with My Aged Care for community transport. The tension between the desire for a standardised protocol and the very real variability in context and patients' medical conditions means that a personalised patient-centred approach is likely to remain necessary. General practice is well placed to provide this. After licence cancellation, the GP and primary care team will remain essential in providing support for the patient.

### Key points

- GPs have a key role to play in assessment for driving cessation in Australia.
- There is no widely accepted office-based toolkit for driving cessation.
- On-road assessment remains the gold standard, but has limited accessibility.
- GPs must balance a range of physical, social and psychological issues in the assessment.
- GPs have a vital role to play in supporting the patient once they stop driving.

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### References

1. Australian Government. Medicare item reports. Australian Government, 2022. Available at [https://medicarestatistics.humanservices.gov.au/statistics/mbs\\_item.jsp](https://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp) [Accessed 19 January 2023].
2. Austroads. Assessing fitness to drive. Austroads, 2022. Available at <https://austroads.com.au/publications/assessing-fitness-to-drive/ap-g56> [Accessed 17 April 2023].
3. National Institutes of Health. Brain health: Medications' effects on older adults' brain function. NIH, 2015. Available at [www.nia.nih.gov/sites/default/files/d7/MedAgeBrain-Brochure.pdf](https://www.nia.nih.gov/sites/default/files/d7/MedAgeBrain-Brochure.pdf) [Accessed 7 June 2023].
4. The Royal Australian College of General Practitioners (RACGP). RACGP aged care clinical guide (Silver book). Silver book – Part A. 5th edn. RACGP, 2019. Available at [www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/silver-book/part-a](https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/silver-book/part-a) [Accessed 17 April 2023].
5. Scott TL, Liddle J, Pachana NA, Beattie E, Mitchell GK. Managing the transition to non-driving in patients with dementia in primary care settings: Facilitators and barriers reported by primary care physicians. *Int Psychogeriatr* 2020;32(12):1419–28. doi: 10.1017/S1041610218002326.
6. Wallis KA, Matthews J, Spurling GK. Assessing fitness to drive in older people: The need for an evidence-based toolkit in general practice. *Med J Aust* 2020;212(9):396–98.e1. doi: 10.5694/mja.2.50588.
7. Johnson DA, Frank O, Pond D, Stocks N. Older people with mild cognitive impairment – their views about assessing driving safety. *Aust Fam Physician* 2013;42(5):317–20.
8. Sanford S, Rapoport MJ, Tuokko H, et al. Independence, loss, and social identity: Perspectives on driving cessation and dementia. *Dementia* 2019;18(7–8):2906–24. doi: 10.1177/1471301218762838.
9. McKernan E, Chia SYD, Traynor V, Veerhuis N, McNeil K, Pond CD. Driving assessments for older adult patients: Interviews with general practitioners to gauge current strategies and future directions. *Aust J Gen Pract* 2022;51(6):457–62. doi: 10.31128/AJGP-09-21-6170.
10. Aged Dementia Health Education & Research (ADHERe). Driving and staying independent: A decision aid for older drivers. ADHERe, 2022. Available at <https://adhere.org.au/olderdrivers/> [Accessed 15 December 2022].
11. Mielenz TJ, Whalen AM, Xue QL, et al. Associations of self-care health behaviors with driving cessation among older drivers. *Front Public Health* 2022;10:794639. doi: 10.3389/fpubh.2022.794639.
12. Australian Government, Department of Health and Aged Care. Health assessment for people aged 75 years and older. Commonwealth of Australia,

2014. Available at [www1.health.gov.au/internet/main/publishing.nsf/Content/mbsprimarycare\\_mbsitem\\_75andolder](http://www1.health.gov.au/internet/main/publishing.nsf/Content/mbsprimarycare_mbsitem_75andolder) [Accessed 25 January 2023].
13. Joseph PG, O'Donnell MJ, Teo KK, et al. The Mini-Mental State Examination, clinical factors, and motor vehicle crash risk. *J Am Geriatr Soc* 2014;62(8):1419–26. doi: 10.1111/jgs.12936.
  14. Kokkinakis I, Vaucher P, Cardoso I, Favrat B. Assessment of cognitive screening tests as predictors of driving cessation: A prospective cohort study of a median 4-year follow-up. *PLoS One* 2021;16(8):e0256527. doi: 10.1371/journal.pone.0256527.
  15. Duncanson H, Hollis AM, O'Connor MG. Errors versus speed on the trail making test: Relevance to driving performance. *Accid Anal Prev* 2018;113:125–30. doi: 10.1016/j.aap.2018.01.004.
  16. Brodaty H, Connors MH, Loy C, et al. Screening for dementia in primary care: A comparison of the GPCOG and the MMSE. *Dement Geriatr Cogn Disord* 2016;42(5–6):323–30. doi: 10.1159/000450992.
  17. Sydney North Health Network. Healthy ageing & frailty. Sydney North Health Network, 2019. Available at [https://sydneynorthhealthnetwork.org.au/wp-content/uploads/2019/06/Frail-SNHN-DL-Brochure\\_6.0-6.pdf](https://sydneynorthhealthnetwork.org.au/wp-content/uploads/2019/06/Frail-SNHN-DL-Brochure_6.0-6.pdf) [Accessed 20 November 2020].
  18. Dickerson AE, Meuel DB, Ridenour CD, Cooper K. Assessment tools predicting fitness to drive in older adults: A systematic review. *Am J Occup Ther* 2014;68(6):670–80. doi: 10.5014/ajot.2014.011833.
  19. Sawada T, Tomori K, Hamana H, et al. Reliability and validity of on-road driving tests in vulnerable adults: A systematic review. *Int J Rehabil Res* 2019;42(4):289–99. doi: 10.1097/MRR.0000000000000374.
  20. Urlings JHJ, Cuenen A, Brijts T, Lutin M, Jongen EMM. Aiding medical professionals in fitness-to-drive screenings for elderly drivers: Development of an office-based screening tool. *Int Psychogeriatr* 2018;30(8):1211–25. doi: 10.1017/S1041610217002678.
  21. Dementia Australia. Dementia and Driving – VIC. Dementia Australia, 2022. Available at [www.dementia.org.au/resources/dementia-and-driving-vic](http://www.dementia.org.au/resources/dementia-and-driving-vic) [Accessed 10 January 2023].